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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,899	10/17/2003	David H. Blount		1957

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David H. Blount
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EXAMINER

YOON, TAE H

ART UNIT PAPER NUMBER

1714

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/687,899	Applicant(s) BLOUNT, DAVID H.	
	Examiner Tae H. Yoon	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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Continuing data regarding 09/149,847 is not consistent with PTO record, and correction is needed.

The fourth line containing the overlapped typing from the bottom of page 9 of the specification is objected.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the use of filler (G) which is not reactive with urea, bio based compound and/or polyisocyanate, does not reasonably provide enablement for the use of filler (G) which is reactive with urea, bio based compound and/or polyisocyanate. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The fillers disclosed and claimed such as melamine, dicyandiamide, melamine cyanurate, amino phosphate, aminopolyphosphate, aminoplast, phenoplasts, powdered synthetic resins, carbohydrates, cyanuric derivatives or their formaldehyde resins would inherently react with urea, bio based compound and/or polyisocyanate, and thus the product would not contain filler. Applicant failed to show the claimed polyurethane composition contains filler.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "selective heating and reacting" in line 2 of claims 1 and 16 is indefinite since said selective heating and reacting is not define.

Claim 2 recites water as a blowing agent, but claim 1 also recites water (C) as a separate component from said blowing agent. Thus, it is unclear whether an amount of water is directed to the amount of water only or to amount of water and blowing agent together. Claim 2 also recites a trademark, Freon, and the use of a trademark in claims is not permitted. A full chemical name is needed.

The recited "derivatives" in line 4 of claim 7 is indefinite absent particular functional groups or substituents. Claim 7 recites urea as filler and thus is confusing since claim 1 recites urea(A) as a reactant. Also, other fillers such as melamine, dicyandiamide, melamine cyanurate, amino phosphate, aminopolyphosphate, aminoplast, phenoplasts, powdered synthetic resins, carbohydrates, cyanuric derivatives or their formaldehyde resins would inherently react with urea, bio based compound and/or polyisocyanate, and thus the product would not contain filler. Therefore, it is confusing.

Improper Markush language is recited in claim 8, and the recited "comprising" in line 2 should be "consisting" and "or" in line 3 should be "and".

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Claim 18 contains two endings and "and mixtures thereof" in line 3 should be deleted.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 11-17, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Blount (US 4,383,078).

Note that the instant invention does not recites any particular reaction condition, and thus any prior art utilizing the recited mandatory components such as (A), (B) and (J) or would inherently meets the instant reaction product regardless of the reaction condition as long as mandatory components are mixed and reacted.

Blount teaches alkali metal polyhydroxy lignin-cellulose polymer and its reaction product with polyisocyanate in abstract and at col. 9, lines 1-15. Said polyisocyanate can be polyisocyanates which contain biuret groups, col. 4, lines 62-63, and it would meet the reaction product of the instant (A) and (J). Thus, a further reaction of said

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polyisocyanates containing biuret groups with polyhydroxy lignin-cellulose polymer would meet the instant product inherently. Note that components reciting 0 parts by weight are optional, and thus are not required. Various polyisocyanates are also seen at col. 4, lines 14-15.

Thus, the instant invention lacks novelty.

Claims 1-7, 11-15, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Case (US 4,990,586).

The instant invention does not specify a particular structure of the claimed polyurethane, and thus polyurethane of vegetable oil having a urea moiety would meet the invention. An invention in a product-by-process is a product, not a process. See *In re Brown*, 459 F2d 531, 173 USPQ 685 (CCPA 1972) and *In re Thorpe*, 777 F2d 695, 697, 227 USPQ 964 (Fed. Cir. 1985).

Case teaches urea-modified polyurethane from castor oil in abstract and at col. 3, line 16 to col. 5, line 51.

Thus, the instant invention lacks novelty.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 3,332,896 teaches oil-modified polyurethane, but fails to teach or suggest the use of urea.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tae H Yoon
Primary Examiner
Art Unit 1714

THY/March 10, 2006